

Listing of Claims

This listing of claims will replace all prior versions in the application:

1 through 10. (Cancelled)

11. (Currently amended) A drive train for the transmission of a variable power at a variable input speed for a power generating station driven with a turbomachine, the drive train comprising:

a power-split transmission for receipt of power from a single source, said power-split transmission having an input shaft, at least one first power branch, and at least one second power branch, wherein the first power branch drives an electric generator;

a hydrodynamic circuit disposed at an output end of the power-split transmission, wherein the hydrodynamic circuit connects the first power branch and the second power branch and controls power flow so that the electric generator is driven at a speed that is substantially constant; and

wherein the hydrodynamic circuit is ~~selected from the group consisting of a hydrodynamic Fettinger converter, a hydrodynamic coupling and a TRILOK converter, each of the hydrodynamic Fettinger a torque converter, the hydrodynamic coupling, and the TRILOK torque converter~~ having a pump impeller connected to a rapidly spinning shaft of the power-split transmission, wherein the rapidly spinning shaft is an output shaft of the drive train to which the electric generator is connected, and wherein the rapidly spinning shaft is part of the first power branch.

12. (Previously presented) The drive train of claim 11, further comprising a second transmission connected in series with the power-split transmission.

13. (Previously presented) The drive train of claim 12, wherein the second transmission is arranged in the second power branch and increases a speed at which the hydrodynamic circuit is operated.

14. (Previously presented) The drive train of claim 13, wherein an output speed is held constant with a maximum deviation of ± 10 percent of a rated value.

15. (Previously presented) The drive train of claim 13, wherein an output speed is held constant with a maximum deviation of ± 5 percent of a rated value.

16. (Previously presented) The drive train of claim 13, wherein an output speed is held constant with a maximum deviation of ± 1 percent of a rated value.

17. (Previously presented) The drive train of claim 13, wherein the hydrodynamic circuit further comprises a pump and a stator having adjustable vanes, wherein power input of the pump can be adjusted.

18. (Previously presented) The drive train of claim 13, wherein the hydrodynamic circuit further comprises a turbine wheel and a stator having adjustable vanes, wherein power flow to the turbine wheel can be adjusted.

19. (Previously presented) The drive train of claim 13, wherein power input occurs via a planetary gear carrier, wherein the first power branch is operably connected to a sun wheel, and wherein the second power branch provides feedback to a ring gear.

20. (Previously presented) The drive train of claim 13, wherein power input occurs via a ring gear, wherein the first power branch is operably connected to a sun wheel, and wherein the second power branch is coupled to a planetary gear carrier.

21. through 24. (Cancelled)